

What we claim is:

1. A digital filter device comprising:
  - one or more computing processors for generating input data strings;
  - 5 an input data memory for storing the input data strings; and
  - a digital filter for reading the input data strings out of the input data memory in a predetermined order to be filtered and for generating output data strings.
2. The digital filter device as claimed in claim 1, further comprising;
  - 10 an output data memory for storing the output data strings generated by the digital filter, and
  - a data processor for reading the output data strings stored in the output data memory in a predetermined order to be processed.
3. The digital filter device as claimed in claim 2, further comprising;
  - 15 a switch table for associating an address of the input data memory in which the input data strings are stored with an address of the output data memory in which the output data strings are stored, and
  - a switching controller for providing timings of reading the input
  - 20 data strings out of the input data memory based on the switch table and of writing the input data strings as the output data strings into the output data memory through the digital filter.
4. The digital filter device as claimed in claim 1, further comprising;
  - a filter memory for storing data-under-calculation upon filtering
  - 25 for a first input data string before filtering for a second input data string from filtering for the first input data string, in a delay circuit included in the digital filter, and for restoring the data-under-calculation to the delay circuit when filtering the input data string subsequent to the first input data string is started.
5. The digital filter device as claimed in claim 1, further comprising;
  - 30 one or more coefficient memories for storing a filter coefficient

corresponding to each input data string of the digital filter,

a filter coefficient corresponding to an input data string to be filtered being set in the digital filter.

6. A digital filter device comprising:

5 an input data memory for storing input data strings;

a digital filter for generating output data strings which are obtained by filtering the input data strings, inputted from the input data memory, and

an output data memory for storing the output data strings.

10 7. The digital filter device as claimed in claim 6, further comprising;

a switch table for associating an address of the input data memory in which the input data strings are stored with an address of the output data memory in which the output data strings are stored, and

15 a switching controller for providing timings of reading the input data strings out of the input data memory based on the switch table and of writing the input data strings as the output data strings into the output data memory through the digital filter.